

COMPUTATION OF PLANE TRIANGLE COORDINATES AND HEIGHT FROM ONE SIDE, THREE ANGLES, AND VERTICAL ANGLE (FED MSR)

For use of this form, see FM 6-2; the proponent agency is TRADOC.

| | | |
|-----------|---------------------|---------------------------|
| COMPUTER: | NOTEBOOK REFERENCE: | DATE: |
| CHECKER: | AREA: | SHEET OF SHEETS |

| INSTRUCTIONS | NOTES |
|---|---|
| <ol style="list-style-type: none"> 1. Select SURVEY CALC (option B) from the MODE MENU. 2. Select TRIANGULATION (option C) from the SURVEY CALCULATIONS MENU. 3. Select the desired record from the TRIANGULATION SUMMARY LIST. 4. Observe the required fields, and enter the desired data. | <ol style="list-style-type: none"> 1. Press ENTER to display the window of legal entries. 2. Enter field data in blocks marked ●. 3. Two triangles can be recorded on this form. 4. Remove window of legal entries by pressing ENTER before pressing the C key to calculate. |

| INSTRUCTIONS | NOTES |
|---|--|
| SKETCH: (DRAW SKETCH, AND LABEL STATIONS BY NAME AND NUMBER.) <div style="height: 150px; border: 1px solid black;"></div> | <ol style="list-style-type: none"> 1. Draw a diagram of the triangle scheme, and label starting base, required side(s), interior angles, and stations by name. 2. Number the stations in the order that the stations are computed. The starting station is Number 1. |

| REQUIRED FIELDS | DATA RECORD | |
|--|---|---|
| ENTER NAME REAR STA: ? | NAME REAR STA: | NAME REAR STA: |
| ENTER NAME START POINT/B OR C: ? | NAME OCC STA (B OR C): NUMBER: | NAME OCC STA (B OR C): NUMBER: |
| ENTER/RECORD EAST START POINT: ? | EASTING: | EASTING: |
| ENTER/RECORD NORTH START POINT: ? | NORTHING: | NORTHING: |
| ENTER/RECORD HEIGHT START POINT: ? | HEIGHT: | HEIGHT: |
| ENTER/RECORD AZ START POINT TO REAR: ? | AZ OF BASE (MILS): | AZ OF BASE (MILS): |
| ENTER/RECORD BASE DISTANCE: ? | BASE DISTANCE (METERS): | BASE DISTANCE (METERS): |
| GRID OR HORZ BASE: ? | (GRID) <input type="checkbox"/> (HORIZONTAL) <input type="checkbox"/> | (GRID) <input type="checkbox"/> (HORIZONTAL) <input type="checkbox"/> |

| REQUIRED FIELDS | DATA RECORD | |
|------------------------------------|--|--|
| ENTER NAME FWD STA: ? | NAME FWD STA: | NAME FWD STA: |
| ENTER INTERIOR ANGLE POINT A: ? | ANGLE A (MILS): ● | ANGLE A (MILS): ● |
| ENTER INTERIOR ANGLE POINT B: ? | ANGLE B (MILS): ● | ANGLE B (MILS): ● |
| ENTER INTERIOR ANGLE POINT C: ? | ANGLE C (MILS): ● | ANGLE C (MILS): ● |
| ENTER VERTICAL ANGLE TO FWD STA: ? | VERTICAL ANGLE (MILS): ● ± | VERTICAL ANGLE (MILS): ● ± |
| RECIP VERT ANGLE (Y/N): ? | (RECIPROCAL) <input type="checkbox"/> (NONRECIPROCAL) <input type="checkbox"/> | (RECIPROCAL) <input type="checkbox"/> (NONRECIPROCAL) <input type="checkbox"/> |
| NEXT TRI BASE BA/CA: ? | (BA) <input type="checkbox"/> (CA) <input type="checkbox"/> | (BA) <input type="checkbox"/> (CA) <input type="checkbox"/> |

REMARKS:

CLOSURE ON KNOWN POINT OR CHECK BASE

| INSTRUCTIONS | | NOTES |
|---|--|---|
| | | 1. Observe closure screen by pressing the T key. 2. Remove window of legal entries by pressing ENTER before pressing the C key to calculate.. 3. Enter K for known point or C for check base. |
| REQUIRED FIELDS (Known Point) | DATA RECORD | |
| ENTER CLOSING ANGLE: ? | CLOSING ANGLE (MILS): ● | |
| ENTER AZ CLOSING STA TO AZMK: ? | KNOWN AZ FORWARD (MILS): | |
| ENTER HEIGHT CLOSING STA: ? | KNOWN HEIGHT (METERS): | |
| ENTER EAST CLOSING STA: ? | KNOWN EASTING: | |
| ENTER NORTH CLOSING STA: ? | KNOWN NORTHING: | |
| PRESS ENTER THEN C KEY TO CALCULATE | | |
| REQUIRED FIELDS | DATA RECORD | |
| RECORD CMPTD AZ TO AZMK: | CMPTD AZ TO AZMK: | |
| RECORD TOTAL AZ ERROR: | TOTAL AZ ERROR (MILS): | |
| RECORD TOTAL HEIGHT ERROR: | TOTAL HEIGHT ERROR (METERS): | |
| RECORD TOTAL DISTANCE OF SCHEME: | TOTAL DISTANCE OF SCHEME: | |
| RECORD RADIAL ERROR: | RADIAL ERROR (METERS): | |
| RECORD ACCURACY RATIO: | ACCURACY RATIO: (CHECK SPECIFICATIONS) | |
| REQUIRED FIELDS (Check Base) | DATA RECORD | |
| ENTER MEASURED AZIMUTH OF CHECK BASE: ? | MEASURED AZIMUTH (MILS): ● | |
| ENTER MEASURED BASE DISTANCE: ? | MEASURED BASE (METERS): ● | |
| RECORD AZIMUTH ERROR: | AZ ERROR (MILS): | |
| RECORD COMPARATIVE ACCURACY: | COMPARATIVE RATIO: (CHECK SPECIFICATIONS) | |
| REMARKS: | | |